A

TREATISE

ON

SKATING:

Founded on certain PRINCIPLES deduced
from many Years Experience:

BY WHICH

That noble Exerciſe is now reduced to an
Art, and may be taught and learned by a
regular Method, with both Eaſe and Safety.

The Whole illuſtrated with COPPER-PLATES, repre-
ſenting the Attitudes and Graces.

By R. JONES, Gent. Lieut, RA

The SECOND EDITION.

—— They ſweep,
On ſounding Skates, a thouſand different ways,
In circling poize, ſwift as the winds. THOMSON.

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[Price Two Shillings.]

TO

THE RIGHT HONOURABLE

LORD SPENCER HAMILTON.

My Lord,

NO one, who has had the pleaſure of ſeeing your Lordſhip upon the ice, will aſk why I was ambitious to prefix your name to the following Treatiſe. — I have often conſidered it as a blunder in many of our beſt authors, that they have dedicated their works to men, who, though conſpicuous for their rank and fortunes, were however wholly unacquainted with the ſubjects which were in this manner put under their protection. — If any one ſhould affect to deſpiſe the reputation of excelling in this amuſement; I would wiſh them to conſider, that merit is due to excellence of every kind; that the antients paid the higheſt regard to all thoſe exerciſes which contributed to ſtrength and activity; the faculties of the mind generally improving with thoſe of the body. — Could we trace all great men through every period of their lives, we ſhould find in the early part of them, that they diſcovered in their juvenile diverſions the ſparks of thoſe qualities for which they became eminent when called to more ſerious and important occupations. Cæſar, or Alexander, would have dreaded as much, when they were boys, to have been outdone in ſwimming, running, or leaping, &c. as they would afterwards the loſs of a battle; and whenever you, my Lord, ſhall be called forth to thoſe employments which your birth and abilities demand, I may venture to prophecy that you will appear as remarkable in the execution of them, as you are now for every elegant and genteel accompliſhment.

I have the honour to ſubſcribe myſelf,

My Lord,

Your Lordſhip's

Moſt obedient,

obliged humble ſervant,

ROBERT JONES.

PREFACE.

WE have the happineſs of living in ſo enlightened an age, that every thing is now reduced to a ſyſtem. Eſſays and treatiſes have been written upon every art, from Machiavel on Government, down to the ingenious Mr. Savigny upon the uſe of the Razor. I mean not, by this expreſſion, to depreciate the latter of theſe writers; for, if the merit of any compoſition is to be eſtimated by the benefit which mankind in general receive from it, there is no one but will prefer the writings of our countryman to thoſe of the Italian. I own, that in this preſent treatiſe I labour under one difficulty, which is, that of not being able, like moſt modern authors, to trace my ſubject back to former ages, and illuſtrate it with quotations from the Greek and Roman authors: but if there ſhould be any of my readers ſo much in love with antiquity, as to reliſh nothing but what was practiſed by our forefathers, I have it very luckily in my power to gratify them, by an extract from the works of Fitzſtephen, a Monk in Henry the Second's time. "When (ſays "he) that great moor which waſhed "Moorfields, at the North Wall of "the city, is frozen over, great "companies of young men go to "ſport upon the ice, and bind to "their ſhoes bones, as the legs of "ſome beaſts; and hold skates in "their hands, headed with ſharp iron, "which ſometimes they ſtick againſt "the ice; and theſe men go on with "ſpeed, as doth a bird in the air, or "darts ſhot from ſome warlike en- "gine; ſometimes two men ſet them- "ſelves at a diſtance, and run one "againſt another, as it were at tilt, "with theſe skates; wherewith one "or both parties are thrown down, "not without ſome hurt to their "bodies; and after their fall, by rea"ſon of their violent motion, are "carried a good diſtance one from "another; and whereſoever the ice "doth touch their heads, it rubs off "the skin, and lays it bare; and if "one fall upon his leg or arm, it is "uſually broken; but young men, "being greedy of honour, and deſi"rous of victory, do thus exerciſe "themſelves in counterfeit battles that "they may bear the brunt more "ſtrongly when they come to it in "good earneſt."

And even ſo early as in the fifteenth century, we may find that this art arrived to ſome degree of perfection in Holland, from the manner in which it is mentioned by Taſſo,

Sì come ſogloin là vicino el polo,
S'avien, che'l verno i fiumi agghiacci
e indure,
Correr ſei'l ren le villanelle à ſtuolo
Con lunghi ſtriſci, e ſdrucciolar ſe-
cure.
Gieruſalemme liberata, canto 14.

It may be no ſmall recommendation of skating, that it is practiſed in thoſe ſeaſons, when ſcarce any other exerciſe out of doors can be uſed with ſafety: but, beſides this, nothing can be imagined more conducive to the health or ſpirits; and I am ſure from experience it is an excellent preſervative againſt the gout, a circumſtance which I am ſurprized has eſcaped the notice of Doctor Cadogan: I hope he will do me the juſtice of mentioning it in his next edition.

It has been ſuggeſted to me, that, in the preſent age, thoſe diverſions only meet with approbation, which bring the ſexes moſt effectually together; and skating is calculated only for the male part of our ſpecies. This objection would have ſome weight, were it true: but, for my own part, I ſee no reaſon why the ladies are to be excluded; to object to it as not being hitherto practiſed, is the effect of prejudice and confined ideas: the ſame ſpirit which eſtabliſhed the Coterie may make this as faſhionable a diverſion for one ſex as the other. No motion can be more happily imagined for ſetting off an elegant figure to advantage; nor does the minuet itſelf afford half the opportunity of diſplaying a pretty foot: a lady may indulge herſelf here in a *tête a tête* with an acquaintance, without provoking the jealouſy of her huſband;

and ſhould ſhe unfortunately make a ſlip, it would at leaſt not be attended with any prejudice to her reputation.

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SKATES may be had, after the Author's Plan, at RICCARD's Manufactory, at the Corner of *Orange Court*, next the *Mews Gate*, *Caſtle Street*.

E R R A T A.

Page 2, Line 12, *for* thread, *read* tread, to fit, &c.
5, —— 2, *for* that motion, *read* that the motion.
8, —— 13, *for* that is, *read* that it is.
15, —— 12, *for* on, *read* of.
Ibid. —— 18, *for* ſhall diſpenſe, *read* may be diſpenſed.

A TREA-

A TREATISE ON SKATING.

SECTION I.

Of the different Methods of fixing on Skates.

VARIOUS methods have been made uſe of, to faſten on the ſkates; ſome have done this by means of a ſtrong tape put through the holes in the front of the ſkate, which is then tied acroſs the toes, and from thence being carried through the rings in the heel ſtrap, is brought back again, and tightly faſtened by a knot, over the inſtep; ſome have their ſhoes ſcrewed to the ſtocks of skates; others have them faſtened to plates of braſs, which are fixed to the skate irons, inſtead of wooden ſtocks: there is alſo another method practiſed by many, which is, the having a piece of plate iron fixed acroſs the ſtock at the heel, and a piece of the ſame ſort on the tread, theſe pieces of iron have their ends turned up; that on the thread: to fit over the edges of the ſhoe ſoles; and the other over the heel, to which the iron is ſcrewed on both ſides.

The method which is taken by the common people is ſo well known, as not to need any particular deſcription; they only make uſe of buckles, ſtraps, rings, and heel pegs *; which

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* Quadrilateral pyramids of iron, about three quarters of an inch in length, joining to the head of the heel ſcrews.

method may be well enough for thoſe who continue this diverſion for a few minutes at a time, and think skating conſiſts in an awkward ſhuffling over the ice, for ten or a dozen yards, for they ſeldom or ever are able to go any greater length without falling, or at leaſt being obliged to ſtop to re-tighten their skates, which by this method of faſtening are continually getting looſe: as they are prevented from ſlipping behind, by means of the heel pegs before-mentioned, ſo they endeavour to keep them ſteady at the toe, by means of ſmall pieces of iron, ſo ſharply pointed as to enter eaſily into the ſole of the ſhoe. I have made repeated tryals of all the above methods of faſtening the skate, but have found none of them ſucceed to my ſatisfaction; and I think the reaſons why they do not are pretty obvious. Tape never can be made a proper faſtening; as it is liable to ſtretch, the knot tied with it muſt be continually growing ſlack: to obviate this defect, it is ſtretched to the utmoſt tightneſs it will bear, ſo that the blood veſſels and tendons of the feet are ſo violently preſſed, that a numbneſs, or cramp, is in general the conſequence; another objection to tape is, that, by its fretting againſt the ſoles of the ſhoes, it oftentimes breaks on a ſudden, which accident if it ſhould happen to a perſon skating with any degree of velocity, the conſequence may be fatal.

When the ſhoes are ſcrewed to the ſtocks, as mentioned in the ſecond method, the skates have no proper play; for, unleſs the ſhoes be large, the ankles will run great risk of being ſprained by the ſudden jirks of the skates, which often happens in going over rough ice; if the ſhoes be too large, the feet will then have ſo much play, that motion muſt be irregular and uneaſy.

As to the third method, where the ſtocks are made of braſs, the ſame objection will lye as to the ſecond; and they will have this defect, that the ſtocks may be eaſily broken.

In the laſt method, we find the skates are ſcrewed by pieces of iron being fixed acroſs the ſtocks, which produces almoſt the ſame bad effects as ſcrewing on the ſhoes: this method is likewiſe very dangerous; for, on any extraordinary inclination of the body ſideways, the iron on the tread may touch the ice, and, by not being pliable, prevent the ſhoe from bending, and throw the skate off its edge; or, by ſticking in the ice, be forced either from the ſtock or from the ſhoe.

The method of faſtening on skates, with ſtraps at the toes and heels, has long been approved of, by moſt skaters who have not arrived to great perfection; it is certainly the beſt method yet known, for plain skating and travelling, becauſe the skates and feet have ſufficient play, and are no ways conſtrained. The reaſon why this method is only fit for plain skating, and travelling, is on account of the following defect, namely, that in any other ſort of skating, where ſudden and irregular motions are made uſe of, the peg will come out of the heel of the ſhoe, and cauſe a fall.

All the preceding methods being defective in ſome particular or other; I ſhall now give one both ſafe and ſimple, which I have practiſed for many years, without the leaſt inconveniency. My method is this: Let the skates be prepared with toe and heel ſtraps, as uſual; but inſtead of heel pegs, let the heel ſcrews be made with flat heads, and long enough to go through the heels of the ſhoes, in which holes muſt be bored, and the heads of the ſcrews ſunk even with the leather, to prevent hurting the feet; to guard againſt which more effectually, let a piece of leather be ſewed to the quarter of the ſhoe, large enough to cover the whole heel, which will defend it ſufficiently from the ſcrew.

The reader will eaſily conceive what advantage this method has over all thoſe before mentioned, from the following obſervations: Firſt, by the ſcrew going through the lifts of the heel, the skate is prevented from altering its poſition in that part; ſecondly, when thoſe ſort of heel ſcrews are uſed, the ſtraps are not required to be drawn ſo tight as to give pain to the feet: I have made, it is true, an objection before, to faſtening the ſhoe to the skates without ſtraps; but this method of ſcrewing them at the heel has by no means the ſame bad effect; for, the ſcrews being in the centre, and the leather pliable, the ſhoes have their liberty at the ſides. I have found by experience, that the skate muſt not be confined at the toes, and yet that is neceſſary to prevent it there alſo from ſlipping. The points of iron on the tread are continued for that purpoſe.

Of the Conſtruction of Skates.

I will venture to ſay, thoſe who have skated in England and in Holland, or have made uſe of Engliſh and Dutch skates, will give the preference to thoſe made after the Engliſh faſhion; not that it is fair to condemn the conſtruction of Dutch skates, as that nation makes uſe of them chiefly for travelling; and here indeed they exceed ours; for, by reaſon of their great length, flat and broad ſurface, they run over rough ice with eaſe and expedition; their irons are likewiſe made low, conſequently not ſo heavy as the Engliſh: ours would by no means be proper for travelling, becauſe the irons are ſhort and circular; not above two inches of their ſurface touch the ice at a time; all our attention is required, to keep the body in an equilibrum on ſo ſmall a baſe, which would be almoſt impoſſible to continue for any length of time; and the weight of the irons would add to the fatigue.

The Dutch, finding by experience that the length and ſtraightneſs of their skate irons increaſed the friction upon the ice, have of late years made them ſhorter and more curved. Skating among the Dutch, is not ſo much an exerciſe or diverſion, as buſineſs and neceſſity; the nature of their country and the continuance of their froſts make it ſo; conſequently, ſafety and expedition is all they have to conſider; and I have before ſhewn that this is ſufficiently attended to, in the formation of their skates. In England, the caſe is different; skating is uſed here as an exerciſe and diverſion only; hence an eaſy movement and graceful attitude are the ſole objects of our attention. To arrive at theſe, nothing can be better imagined than the preſent form of our skates.

The reaſon we differ from them in the make of our skates is, that moſt of the graceful attitudes and movements are performed on the outſide edges, with variety of curved lines; ſome of which being made infinitely ſhort, if the irons were not of a circular form, it would be impoſſible to turn in ſo ſmall a ſpace: as this circular form accelerated the motion, and was the firſt improvement on Dutch skates, ſo the lowneſs of the iron was ſoon found to be an hindrance to a proper inclination of the body. Hence their height was increaſed, which alteration anſwered extremely well, particularly in aſſiſting the long roll, which before could not be done in a proper and becoming poſition.

Theſe amendments and alterations being made with ſo much ſucceſs, many others ſoon followed, which would be difficult and tedious to explain by words only: I ſhall therefore refer the reader to the Plates. Plate I. Fig. I. repreſents a ſkate, made after the Engliſh faſhion, with ſome improvements; the proportions are as follows: Let the diſtance from the point of the fender, A, to the toe hook *, which is ſhewn by the pricked line, be one inch, and three quarters; B, the fort of the iron, whoſe lower ſurface is five ſixteenths of an inch in breadth, and gradually increaſes

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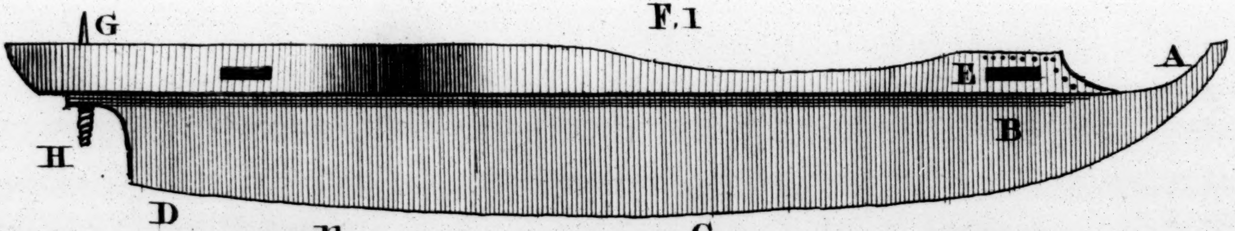
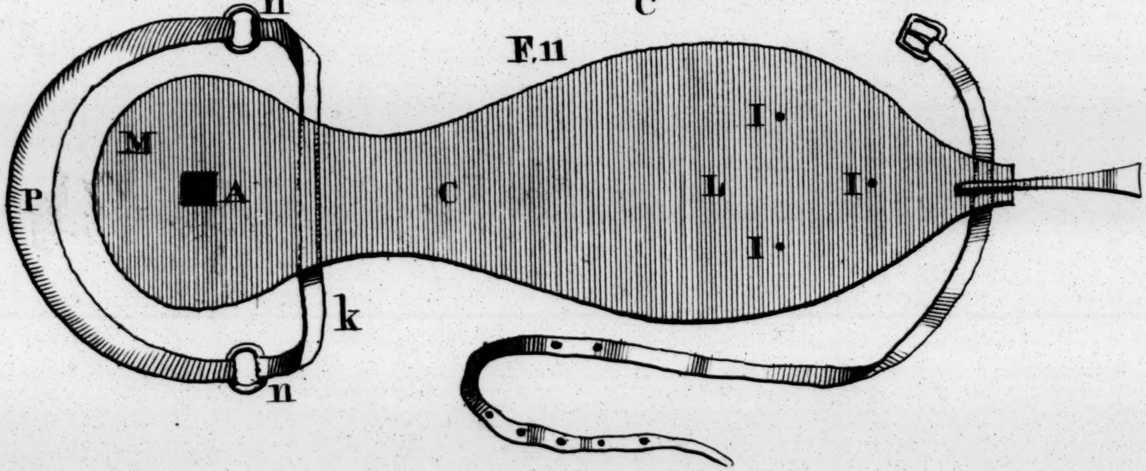
* This hook is made of the ſame piece with the skate iron; it goes into the ſtock at the toe, over the ſtrap hole, to keep the iron and ſtock together.

F, 1



F, 11



Darling f.t Newport S.t

to five eighths of an inch, at the point of the ſender; and from B, muſt gradually decreaſe to a bare quarter of an inch, at the heel D. C, the arch where the height of the iron is one inch three eighths; at B, one inch one eighth; and at D, one inch and a quarter: the groove that is cut in the ſtock, to receive the upper edge of the iron, is ſeldom made more than a quarter of an inch deep, ſo that the height of the iron from the ſtock will be at the arch one inch and one eighth, which is high enough for any ſort of ſkating. E, the toe ſtrap hole; F, the under ſtrap hole; each of theſe holes muſt be cut ſo that the ſtraps may go in very tight. G, the heel peg, whoſe diameter at bottom is a quarter of an inch, and at top one eighth; its height is determined by the heel of the ſhoe with which it is to be worn, but is ſeldom leſs than half an inch. H, the heel ſcrew, which ſhould always be made ſhort.

Fig. II. is a plan of a ſkate compleat, with ſtraps, &c. M, the heel of the ſtock, whoſe diameter is two inches and three eighths. G, the waiſt, whoſe diameter is one inch one eighth. L, the tread, which is two inches and ſeven eighths in breadth. The thickneſs of the ſtock is three quarters of an inch; but the ſurface of the tread muſt be depreſſed a quarter of an inch, that the ball of the foot may reſt eaſy.

I. I. I. are little ſharp points of iron, each of which projects from the ſtock about one eighth of an inch; the diſtance from the centre of the under ſtrap hole, to the extremity of the heel, is two inches and a half; and from the centre of the heel peg, A, to the extremity of the heel, one inch one eighth; K, the under ſtrap; P, the heel ſtrap, N. N. rings to which the ſtraps are ſewed; the length of the under ſtrap from ring to ring is five inches and a half, and the heel ſtrap ſeven inches; the length of the toe ſtrap is determined by the ſize of the foot, but it muſt always ſit very tight in the ſtock.

N. B. Theſe proportions are for a middle-ſized foot.

I have ſaid nothing on thoſe ſkates whoſe ſurfaces are grooved, and are commonly called fluted ſkates, becauſe I think their conſtruction is ſo bad, that they are not fit to be uſed; in fact, they are ſo generally diſapproved of, that I ſhall diſpenſe with explaining their defects.

Of the Firſt Poſition.

Having fixed on the ſkates, according to any of the preceding methods, or in what manner you like beſt, place your heels together, with the toes inclining outwards; then lift up the left foot, without bending the inſtep, and put it down again in the ſame poſition, with your heel facing the ball of the right foot, at ſix inches diſtance; then with a ſmall force throw your body forwards, bending the left knee a little more than in common walking; at the ſame time you throw yourſelf forwards, ſtrengthen the right knee, ſo that you may preſs on the inſide edge of the ſkate, and force yourſelf forwards on the left leg; this method muſt be obſerved with both legs, and is called a Stroke.

As it would be difficult for beginners to continue long on one leg; which to attempt, they would get many falls; therefore I would adviſe them, to make their ſtrokes as ſhort as poſſible.

There are, beſides theſe inſtructions for managing the feet, others as neceſſary for the head and arms; which in ſkating muſt cooperate with the legs. It is remarkable that learners throw their arms about careleſsly, or in a wild manner, as if they were catching at ſomething to prevent their falling; which is the very means of throwing them down: the body being ſupported on ſo ſmall a baſe as the edge of the skate, the poize is very difficult to attain, and I believe equal to that of walking on the tight rope, in which it is ſeen how eſſential the arms are, in preſerving a proper balance; on the ſame principle, the arms act in skating, ſerving as a counterpoiſe when they are moved; and if they are not properly diſpoſed, it will be impoſſible to ſtand, on either the out or inſide edge, with any certainty. At firſt, the arms ſhould be held out before, where they may be uſed to aſſiſt the body; but if you throw one of them behind in going on, you will find it immediately retard your motion, as well as alter your intended courſe.

The head ſhould alſo be held ſtill; but as that is rather difficult at firſt, you may move it from ſide to ſide as often as you change your feet, and let the eyes be fixed on the fender of the skate you are moving: in changing the feet in order to make a new ſtroke, the motion muſt not be the ſame as in walking, which is a thing that often eſcapes young beginners; who are often obſerved, when changing their feet, to bend the knee only, and lift their legs up too high behind them; when on skates, we have not the power of riſing on the toes, or of even bending the knee, as we do in walking, where we are obliged to riſe ourſelves upon the toes of one foot, in order to bring the other forward, without its touching the ground; for want of making theſe obſervations, young beginners make no difference between skating and walking, in the uſe of their legs; forgetting that thay cannot bend the joints of their feet, nor riſe on the toes, as they endeavour to do; which cauſes their feet to ſlip up ſo ſuddenly behind, and which not only appears very aukward, but hinders them from performing any one ſtroke they attempt. With great pains indeed and long labour, many inſenſibly arrive to a tolerable proficiency; but this they might have acquired in half the time, with a very little trouble, had they received proper inſtructions at firſt.

As we have explained the difference between ſkating and walking, and proved that the feet cannot act in both alike; it is proper next to teach in what manner you muſt act, to ſupply the place of bending the feet; which may be done, by lifting the knees conſiderably higher than in walking; and putting them down bent, and with a ſtiff inſtep (as before directed), ſo that the irons of the ſkate may always come down parallel to the ice; which method muſt be followed on all occaſions, with this difference only, that they are ſometimes put down flat, and ſometimes on their edges, according to the ſtroke intended.

The rules which I have here laid down, are much more neceſſary for grown perſons than for youth: the latter, beginning with ſpirit and reſolution, ſcramble on in a careleſs manner, not regarding a few fails, which ſeldom affect them: in grown perſons, the caſe is different; their joints are not ſo pliable as eaſily to be bent into various poſitions; and whenever they fall, they come down with ſuch violence as often proves fatal. The firſt poſition is nothing more than learning to ſtand firm on the ice; which having learned, you are properly prepared to proceed with the more agreeable part of the art; for the firſt poſition may be ſaid to be only a preparative to skating, as turning out the toes is to dancing.

Of the Inſide Edge.

As moſt people fall into this manner of ſkating before they attempt any other, I ſhall lay down ſome plain rules, by which it may be learned with eaſe and certainty in a very ſhort time.

Let it then be remembered, that nature may be almoſt always improved; and that whatever contributes towards that improvement, ought not to be eſteemed trifling or unneceſſary: the inſide edge is ſometimes required, in performing ſome of the more difficult manœuvres; therefore it ought not to be forgot, nor neglected, as it is by many, when they have learned to go on the outſide; not reflecting within themſelves, that the perfection of every art depends on its firſt principles;

ciples; and to attain true perfection, all its different branches muſt concur.

When you have learned to ſtand firm, and to move about, without falling; the method of proceeding, in order to gain the inſide edge, is this: ſuppoſing you would make a ſtroke with the right foot, you muſt, as ſoon as your foot ſets off, lift up the left foot behind the right, with the toe inclining downwards, at about ſix or ſeven inches diſtance from the right heel, and with the ſender two or three inches from the ice; this poſition of the left leg, with the head at the ſame time turned to the left, the right arm a little bent, and held out on the right ſide nearly as high as the ſhoulder, and the left arm held ſtill cloſe to the ſide, will cauſe you to make a ſweep to the left on the inſide edge. This poſition reverſed, will carry you with a ſweep on the left leg to the right; in going on the inſide edge, keep the inſtep ſtiff, ſo as not to bend on either ſide; your obſerving this attitude will always bring you on the inſide edge, though you ſhould begin the ſtroke on the flat. When you have practiſed theſe rules, ſo as to be able to keep your poize on the edge, and to make long and ſhort ſtrokes at pleaſure, and with certainty; you may next proceed to travelling, which we will next treat of.

Of * travelling on the Inſide Edge.

Travelling on the inſide edge is by no means pleaſant, nor is it often practiſed by thoſe who are further advanced in skating: yet it is

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* By travelling, is not meant going a journey, as the common uſe of the word ſeems to imply, but a term for a particular movement on the ſkates.

is ſometimes neceſſary, to relieve, when we are tired of going on the outſide edge; which, though an agreeable motion, and pleaſing to the ſpectator, is fatiguing if continued long without changing to the inſide.

It is amazing what relief is given, by changing from one edge to the other, in going a journey of forty or fifty miles, which is frequently done in Holland and many other countries; and ſometimes twice that diſtance in one day. Perhaps ſome of our Engliſh skaters will deſpiſe learning the inſide edge, becauſe it is not a graceful attitude, and that they have no occaſion to make ſuch long journies; therefore would rather chuſe to travel on the outſide edge, as it is more pleaſing

Tho' theſe objections may be made, and perhaps appear reaſonable to the unexperienced; yet, I would not adviſe any one to neglect making himſelf maſter of the inſide edge, before he attempts proceeding any further; by the help of which, he will not only be able to roll ſooner, but with more eaſe; becauſe the finiſhing of every roll is on the inſide edge.

That changing from one method of travelling to the other, muſt give relief, is obvious; and may be proved by any one action of our bodies, which, if continued to a certain time, becomes tireſome, the tone of the muſcles and ſinews being ſtrained.

The reaſon why it is neceſſary, in skating, to alter our attitude pretty frequently, is, that every motion, being in æquilibrio, is conſequently more fatiguing than when we do not depend on ſo nice a poize.

Having theoretically proved the utility of travelling on the inſide edge; I ſhall proceed with giving ſuch inſtructions, as, if duly obſerved, any perſon may eaſily become maſter of the ſame. When you have made yourſelf perfect on the inſide edge, and on both legs alike; begin to travel in this manner: Having put one foot down, to make a ſtroke, ſo far advanced, that the diſtance from the heel to the toe of the other foot be about twelve inches; ſet off on the flat of the skate, and gradually incline to the inſide edge: we will ſuppoſe this ſtroke to be made on the right foot, with no other aſſiſtance than the preſſure of the body; by this method, it would be impoſſible to travel faſt; which to do, you muſt force yourſelf on with the other foot, as deſcribed in page 16; and directly upon the beginning of the ſtroke raiſe the left foot, about eight inches behind the right heel: this poſition muſt be continued till you change the ſtroke on the other leg; which muſt be done according to the preceding directions, reverſed: a ſucceſſion of theſe ſtrokes, made alternately, will accelerate your motion, in proportion to the curves you form; and the diſtance of time, in going any determined diſtance, will be as the curvature of the lines of direction you move in: as curves thus made are indefinite, I ſhall not pretend to give any particular form of them; inſtead of which, let us deſcribe a channel or road, in order to regulate the curves or ſweeps in the beſt manner for expeditious travelling.

Suppoſe a journey of ten miles, to be perfomed by two skaters, who ſhall move with equal velocity, one on a road ſix feet broad, which is deſcribed by the lines below, 1, 2, 3, 4, Fig. 3; and the other on a road eight feet broad, as deſcribed by the lines 5, 6, 7, 8, Fig. 4.

Fig. 3.

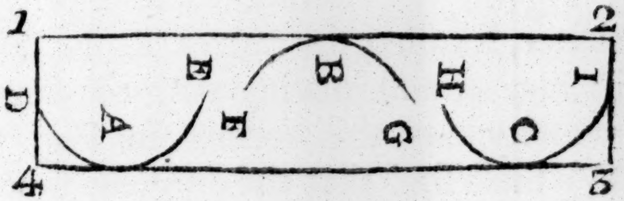
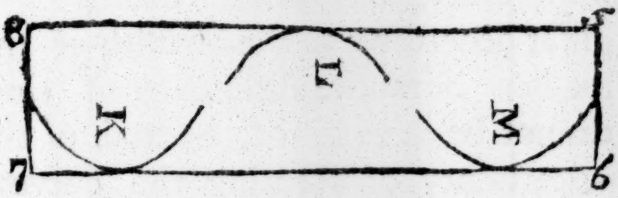


Fig. 4.



In figure 3, the curve lines A, B, C, repreſent the lines of direction; A, a ſtroke made on the right foot, from D to E; B, the ſecond ſtroke on the left foot, from F to G; C, the third on the right foot, from H to I: in this manner the curves are formed, between the lines 1, 2, 3, 4, alternately, from one foot to the other.

Again, we will ſuppoſe another skater, forming the curves K, L, M, in Fig. 4, and moving with the ſame velocity as the former in Fig. 3. We ſhall find that the different times of performing their journey will be as the length and flexure of the curves they deſcribe, which curves will differ according to the breadth of the roads. Now the difference of time cannot be aſcertained, bacauſe of the uncertainty of forming the curves: yet I think that the figures already de-

deſcribed, give ſufficient proof, that the traveller in the road of ſix feet broad will arrive at his journey's end a conſiderable time before the other in the road of eight feet broad. Although what has been ſaid may be conceived on firſt ſight of the figures, and any further demonſtration diſpenſed with; yet, according to the rules of art, we muſt proceed, in a regular manner, to prove the moſt trifling propoſition.

It would be ſomewhat difficult for any one to know, when he is travelling, whether he makes his road ſix or eight feet broad, the breadth being intirely imaginary: but let this rule be obſerved; which is, always to make the ſweeps as ſtraight as poſſible, the more ſo the better; and the more direct the courſe, the leſs will be the reſiſtance and friction; which ſufficiently proves that narrow roads are beſt.

In travelling on the inſide edge, the head and arms are not to be uſed in the ſame manner as in beginning to skate. The manner in which they ſhould be employed may eaſily be conceived, being no other than that poſition in which they are held at the beginning of a minuet, only that the arms ſhould be a little more advanced; and if they are ſuffered to hang with freedom, their motions will be governed by thoſe of the body, which I think is the moſt graceful way they can be employed: the head muſt incline from ſide to ſide, gradually, as the ſtroke is changed, always looking forward to the way you are going.

The above inſtructions, followed with attention, added to a little practice, will ſoon make every motion become eaſy and familiar, and to ſeem in a manner natural.

Of the Outſide Edge.

Young beginners will be a little ſurprized, when they find they have not yet come to that movement, which appears ſo agreeable to the eye, and which they are all ſo ambitious of attaining; and imagine, by the preceding inſtructions, that there is more difficulty in their way than they are aware: but they may be aſſured, that it will be eaſier in practice than it appears in theory.

I hope what has been ſaid, will give the reader ſufficient encouragement, to attend with patience to the following inſtructions; which, when put in practice, will give full ſatisfaction for the diſagreeable time ſpent in learning the firſt principles.

To preſerve the balance on the outſide edge, requires more skill than any of the former poſitions; and is ſo difficult to be acquired, that I have known many to ſpend three or four winters in learning it. This I can impute to no other cauſe than their not having purſued a proper method at firſt ſetting out. It is common for thoſe who firſt attempt moving on the outſide edge, to inquire of others, in what manner they muſt begin; and upon not finding themſelves immediately ſucceed, attribute it to the fault of their adviſers; and apply to ſome others, for different inſtructions: theſe inſtructions being generally different, and the learner not having a proper perſeverance to continue his attempts, but continually changing from one method to another; is the reaſon we ſee ſo very few arrive at any perfection, on the outſide edge.

To prevent theſe diſappointments, I will lay down one general rule, which I have never known to fail, even with thoſe who at firſt ſeem the moſt aukward.

Suppoſe a ſtroke to be made on the left leg; it muſt be put down on the flat, with the knee bent, the head inclined to the left, the right arm held out nearly upon a line with the ſhoulder; and the left arm held cloſe to the ſide: then, with the right foot, impel yourſelf to the left, by often preſſing the inſide edge of the skate on the ice; the left foot is not to be taken off: by this method, you will make a ſweep, which you muſt endeavour to increaſe, by inclining the body to the left; and bearing on the outſide edge of the skate, and by gradually increaſing your inclination, and turning the head more and more to the left ſhoulder, you will form a ſpiral line: this method muſt be reverſed, for the right leg; and if practiſed for two or three days, the outſide edge may be acquired.

The impellent foot being wholly employed at firſt learning the outſide, no regard is paid to its poſition during the intervals of each ſtroke: but when the outſide is acquired, it muſt then be thus diſpoſed of. Suppoſe a ſtroke to be made on the left leg, raiſe the right leg behind, by bending the knee only; which knee muſt not be more than three or four inches from the left ham, and the foot hung in an eaſy manner, with the toe downwards, within two or three inches of the ice.

When you can follow this method with both legs, and change the poſition of the arms with the ſtroke, you will then be prepared for travelling; which I ſhall treat of next.

Of travelling on the Outſide Edge.

This ſort of travelling is thought to be more pleaſing and expeditious than any other: it is the method which the Dutch chiefly make uſe of, in performing their long journies, ſometimes with heavy loads balanced upon their heads.

They travel on the outſide edge, with their hands in their ſide pockets; this poſition of the arms I would recommend, as the moſt eaſy: but for expedition, they muſt be held forwards, and uſed occaſionally to aſſiſt the motion; in what particular manner they are to be employed on ſuch occaſions, experience will teach beſt; for moſt people differ in the manner of uſing their arms when going faſt on the ice, as they do when running on the ground; to ſtrike on the outſide edge, has already been taught; but to travel on the outſide, you muſt make ſtrokes alternately with both legs: and at every ſtroke, let the impellent foot be held, nearly parallel to the other, at about twelve inches diſtance, for about two or three paces; and then brought up ſuddenly to the other, in order to make a new ſtroke; the faſter you would go, the farther the foot muſt be advanced in taking the ſtrokes; but to move ſlowly and gracefully, it muſt be put down, with the heel at a little diſtance from the toe of the other foot.

The head is governed by the changing of the legs, and muſt be gradually moved from ſide to ſide, ſo that you may always look in the ſame direction with the curve you make; to be more explicit, the whole body and head muſt be inclined alternately from one ſide to the other, with as much eaſe and regularity as poſſible. When all theſe motions become familiar, travelling at a moderate rate will not be in the leaſt fatiguing.

To travel very faſt, the ſtrokes muſt be made as ſhort, and the curves as nearly approaching to right lines, as poſſible.

Of the Curved Line on the Outſide Edge, called Rolling.

This ſort of ſkating, performed by a perſon of a genteel figure, is the moſt graceful and becoming movement of all others; and muſt appear to thoſe who neither conſider, nor underſtand, the reaſon of the body's being preſerved ſo long in a falling ſtate, as it were ſomewhat amazing: but, if mechanically conſidered, it may eaſily be conceived, with this allowance, that nature here, as well as on many occaſions, acts in a manner that cannot be intirely reduced to mechanical principles. This may be proved, by ſuppoſing a figure of a man, made of wood; and that the centre of gravity in ſuch a figure was in the ſame point as it is ſaid to be in the human body; in which it is ſituated in the middle between the two hips, or in that part called the Pelvis. Now ſuppoſe the figure to ſtand erect, with the feet placed parallel to each other, within a ſquare of twelve inches; then, if a perpendicular be let fall from the centre of gravity, it will meet the ground nearly in the middle of the ſquare: but if the body be inclined any way, ſo that the perpendicular ſhould not touch the ground in the centre of the ſquare, the figure will immediately fall, even ſuppoſing the limbs moveable, and placed in the beſt manner for preſerving the poize: in the human body the caſe is different; which I have found by experience, that a man may ſtand, though he be ſo inclined, that the perpendicular ſhould fall at the toes (provided he has the proper uſe of his limbs). I can aſſign no other reaſon for his being capable of ſupporting himſelf in ſuch an attitude, than the wonderful conſtruction, and manner of acting of the muſcles.

By the preceding remarks, as well as by the following inſtructions, we ſhall find that ſkating manœuvres are mechanically performed; rolling, ought not to be learned in a hurry, nor with both legs, till you are perfect on one; and it is difficult to roll well, after you have contracted a bad habit, which is always the conſequence of learning too ſoon on both legs. This I have obſerved in many, who, though they were firm on their ſkates, could not move equally well on both legs.

Rolling muſt be learned in this manner. Take a ſtep with the left foot, putting it down flat, at about ten inches from the ball of the right foot; and let the toe be turned pretty much out: incline the body forwards, and the head to the left, directing the eyes that way; let the arms be eaſily croſſed over the breaſt; ſome chuſe to let them hang down at their ſides, and others put them behind their backs: both theſe methods are ſtraining, and not graceful.

At ſetting off, the left knee muſt be a little bent, and gradually ſtraightened, as you move, till it is quite ſtraight; which it muſt be at the end of the curve. The right leg muſt be ſlowly raiſed behind, with the toe out, and pointing downwards: this leg ſerves as a counterpoize to the inclining body; when you have made about half the ſweep, bring the right leg ſlowly forward, in order to take another ſtroke, in the ſame manner as with the left, only that the motions and poſitions muſt be reverſed; in rolling faſt, you muſt force yourſelf on with the impellent foot: but for ſlow rolling, the inclination of the body will be ſufficient; to what height the leg is to be raiſed behind, cannot be determined, that depending intirely on the ſize of the curve; that is, the larger the curve, the higher the leg muſt be raiſed: but in common rolling, the toe need not be above three or four inches from the ice. The figure in the ſecond plate repreſents a proper attitude for genteel rolling.

Of Running.

Running is abſolutely neceſſary in performing ſome of the maſterly parts of this art; without which, it would be impoſſible to make the movements ſufficiently large; any tolerable ſkater could run, were he not afraid of falling; which moſt are, becauſe ſuch ſort of skating appears wild and dangerous; and indeed is ſo in thoſe who attempt running in the ſame manner as on the ground. That thoſe who chooſe to be maſters of ſuch manœuvres as are facilitated by running, may not be diſcouraged in their attempts; I will give ſuch inſtructions, that they may venture without danger of falling.

It may be obſerved of skaters in general, who attempt to run, that, inſtead of doing ſo, they rather keep ſliding along, with their feet nearly parallel, and often fall: the cauſe of their falling is, that they cannot ſtop the foremoſt foot, in order to take a ſtep with the other; for the skate, moving forward in a right line, can have no hold on the ice, to check the motion; ſo that when the other foot is brought forward, that on which you are moving immediately ſlips back. The principal intent of running, is to add to the force of the body. Whenever we are deſirous to make a very large roll or circle, &c. in the ſame manner as in leaping on the ground; we find ourſelves aſſiſted by running: but the above deſcribed method of doing this would not aſſiſt the velocity of the body, becauſe, the skates having no hold of the ice (as was before obſerved), it would be difficult to ſtop, ſo as to make a ſpring, at the beginning of any manœuvre. If the following method be obſerved by a good skater, he may run as firm, and leap nearly as high with skates as without. In running, take ſhort ſteps, turn out the toes, as much as you can with eaſe, and bring down each foot on the inſide edge; at every ſtep, ſtrike on the ice, in the ſame manner as if you were ſtamping on the ground, and let the heel of the iron touch the ice firſt; the arms muſt be uſed as they are in running on the ground, the body inclined forwards, the head kept ſtill, and the eyes fixed on the ſpot where you intend ſetting off with the ſpiral line, circle, &c.

Many accidents happen upon the ice, from the ſkaters running violently againſt each other; which is only to be prevented by learning the method of ſtopping themſelves ſuddenly. This, after they have acquired the art of running, may be eaſily done, by leaping up, and coming down with the feet parallel, at about twelve inches aſunder, and turned as much as poſſible to the right or left; ſo that according to the ſeaman's phraſe, the broad ſides of the ſkates may be before you: when travelling, you may ſtop yourſelf, by only turning the feet to the right or left, as before deſcribed, and preſſing on the inſide edge of the foremoſt foot. By theſe methods you may avoid many dangers, ſuch as banks of ſnow, broken ice, &c. But the method which ſkaters generally make uſe of to ſtop themſelves, is by no means ſo certain; for as they only bear on the heels of their ſkates, they run a conſiderable diſtance before they ſtop, by which means they not only ſpoil the ice, but often break their ſkates; and, unleſs they perceive the danger at ſome diſtance, are not able to eſcape it.

SECTION II.

Of the Spiral Line.

IN the preceding part of this work, I have endeavoured to lay down proper inſtructions, for plain ſkating, and graceful rolling; and ſhall now treat of the more maſterly parts of this art, which cannot be attained by thoſe who are not naturally active, and poſſeſſed of ſome genius. It is rather difficult to form a ſpiral line, and at firſt learning is generally attended with ſome falls, owing to the great inclination of the body; but more frequently to the skates having a dull edge.

To form a large ſpiral line, take a run about thirty yards; and when you begin the line, throw yourſelf with great force on the left leg on the ouſide edge, the knee bent, and the body inclining forwards as much as poſſible; the arms muſt be held in the ſame poſition as an archer is deſcribed drawing his bow; the right leg raiſed behind as high as you can with eaſe, with the knee bent ſo much, that, as you look over the left ſhoulder, you may ſee the foot; as you proceed gradually, raiſe the body, and drop the right leg, ſo that, when you finiſh the line, the body may be upright, and the legs brought together; then take a ſmall roll on the right leg; but before you begin, drop the left hand on the hip, and advance the right higher than the head, keeping your eyes fixed upon it at the ſame time; this attitude has a pretty effect at the concluſion of the ſpiral line.

Of the Inſide Circle.

The inſide circle is the largeſt manœuvre on the skates: it is neceſſary to be learned, becauſe it teaches the method of turning out the toes; without which many other movements could not be done: the circle is thus performed; firſt take a run; then ſpring off on both legs, on the inſide edges, with the right foot firſt, turning yourſelf to the left; let the feet be in a line with the body, and the diſtance from heel to heel about eighteen inches; the feet muſt be turned ſo much out, that the skates may make but one track on the ice; bear full on the right foot, but raiſe the heel of the left skate a little, to prevent its catching in the ice, and tripping you up; at firſt ſetting off, ſtoop, bend the knees, and look to the right: but as you go on, raiſe yourſelf ſlowly, and ſtraighten the knees till you come quite upright; the heels muſt be gradually brought together, and the head turned by degrees to the left: the hands may be diſpoſed of any way, ſo that they are kept ſtill; it is to be obſerved, that the larger you intend the circle, the longer you muſt look to the right; and the leſs the circle, the ſooner you muſt look to the left.

If you would form a ſcroll or ſpiral line, inſtead of a circle, you muſt, at ſetting off, place the left foot, ſo that it may cut a track about four inches behind the right; and when you have gone a little way, bring the head to the left, and look down at the left foot: by this method you may cut a compleat ſcroll; at coming near the end of it, ſhrink in the body, and raiſe the ſhoulders, which will give you a ſhort and ſudden turn. The circle and ſcroll may be done equally as well to the right, by reverſing all the motions.

Of the Outſide Circle.

I have ſeen but few who were capable of making this circle: the reaſon of which is, that it is both difficult and ſtraining; but if once learned, you will then have ſuch command of your skates, that hardly any jerk, or irregular motion, will throw you off your balance.

As the performing of this circle is difficult, and requires much practice, it is better at firſt not to attempt to make it either compleat or large: but begin by throwing yourſelf on both feet, on the outſide edges, with the right foot firſt; let the force be juſt ſufficient to carry you a few yards, at the ſame time making a full face to the left: both feet muſt be turned out ſo much that the toes may be a little farther back than the heels; let the ſpace between the heels be about two feet; look to the right, quite over the ſhoulder; ſtoop, and bend the knees; keep on the outſide edges, but raiſe the left heel a little; the left foot muſt not run in the ſame track with the right, but muſt be two or three inches advanced; the beſt poſition for the arms is, to hang them in an eaſy manner before you; if, after making ſome tryals, you can move a few yards on the outſide curve, you may then attempt to make a large circle; which may be done by taking a run, to accelerate the motion.

A ſcroll may be cut, inſtead of a circle, by looking more over the right ſhoulder, and advancing the left foot farther than in making the circle.

Of the Flying Mercury.

After any one is maſter of the preceding manœuvres, he will find all the others to be very eaſy: as for example, to perform the attitude of a flying Mercury, is nothing more than the ſpiral line, except that the arms are not employed in the ſame manner; the figure in Plate III, repreſents the attitude on the right leg, and almoſt at the concluſion of the ſtroke; but at the beginning the body muſt lean forwards pretty much, with the right hand pointing to the ice, and ſlowly raiſed with the body, till you are quite upright; when you would finiſh the ſtroke, bring down the left leg, and throw it ſuddenly up before you, at the ſame time bearing on the right heel; by which means you may ſpin round two or three times, in order to conclude the ſpiral line, which ſhould always be formed when in the attitude of Mercury.

Of the Fencing Poſition.

This poſition, though pleaſing to the eye, is ſomewhat difficult to perform; the manner of doing it is this: when you have taken a ſufficient run to increaſe the velocity of the body, throw your feet in a right line on the flat of both skates, with the right foot firſt; raiſe the left heel a little up, but tread flat on the right foot; the right arm muſt be held out nearly in a line with the ſhoulder, and the eyes fixed on the fingers of that hand: the body muſt be held as upright as poſſible, the breaſt held out, and the head back: all theſe poſitions muſt be well obſerved; otherwiſe it will be impoſſible to move in a right line, or to keep your balance. This attitude is repreſented by the figure in the fourth Plate.

Of the Salutation.

This is a manœuvre that cannot be exhibited, unleſs the performers ſkate equally well, and are maſters of the inſide circle, and rolling.

Snppoſe two ſkaters ſtanding oppoſite each other, at about twenty feet aſunder; then let them both make a ſweep on their right legs, till they come near enough together to join their right hands, keeping them no longer joined than while they paſs one another; when they muſt immediately turn themſelves on their right feet, and ſtrike off with an inſide circle to the left, drawing their right legs in the ſame manner as in making a bow at the beginning of a minuet: at commencing the circle, the hat muſt be pulled off, and held down during the bow, which may be made according to fancy; at the concluſion of the bow, both muſt turn ſuddenly round on the left leg, which may be eaſily done by throwing the right leg up to the left; when, turning, the hats muſt be put on: by thus turning round, they will come face to face, as at firſt ſetting off.

Of the Serpentine Line.

The ſerpentine line may be made either on one leg, or both; the method of forming it on one leg is this: take a ſhort run, to aſſiſt your motion; then ſtrike off on the right leg, holding the right arm out in a line with the ſhoulder, the left leg up behind as in common rolling: the left arm may hang down at the ſide; at firſt ſetting out, make a curve to the right, but make it as ſtraight as you can; when you have gone a few yards, turn your head to the left, and bear on the inſide edge; bring the left foot forward, and turn the right arm to the left: keep in this poſition till you chooſe to go again to the right, which may be done by changing the attitude to the ſame as at firſt ſetting off. By this method a ſerpentine line may be formed, as long as you can continue your courſe on one leg.

To form a ſerpentine line on both legs, ſet off in the ſame manner as in making the inſide circle; then change to the poſition for the outſide circle; thus changing from one to the other, a ſerpentine line may be formed, more or leſs curved, according to the fancy.

N. B. The arms muſt be held in the ſame manner as in the fencing attitude.

Theſe manœuvres plainly prove what I before ſaid, that the perfection of every art depends upon its firſt principles; for in theſe are uſed almoſt all the poſitions before taught.

Of travelling Backwards.

To travel backwards, is rather a whimſical movement than either neceſſary or pleaſant: but as there may be ſome who wiſh to attempt it, I will lay down the plaineſt inſtructions for it in my power. To make a ſtroke on the left leg, turn in the toe of the right foot; and preſs on the inſide edge, to force yourſelf backwards; and lean forwards as much as you can; the ſame method muſt be followed for the other foot: this movement requires a great deal of practice; but when once you have learned the method of making the ſtrokes, you will be able to go at a great rate.

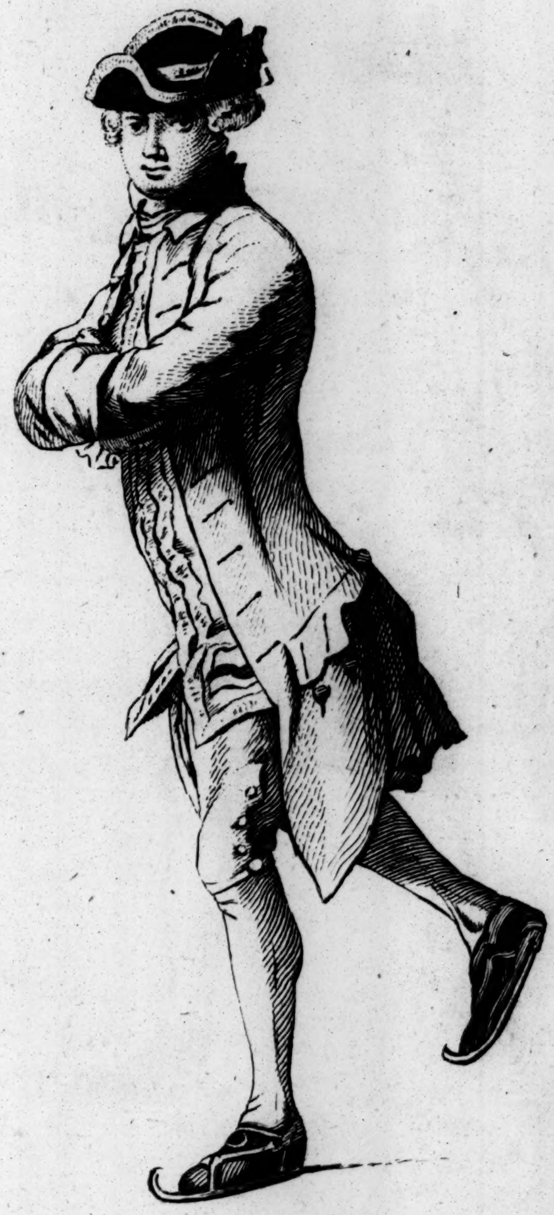
To cut the Figure of a Heart on one Leg.

This is a pleaſing manœuvre, and but lately known; it is difficult, though graceful if well done; the method is as follows: firſt ſet off, with a ſweep on the outſide, on the right leg; and when you think you have formed half the figure of a heart, which you will almoſt naturally do in common rolling, turn yourſelf ſuddenly half round; then throw yourſelf on the inſide edge, and by looking to the right you will move backwards. This motion muſt be continued till you come to the place where you began the heart; it would be rather difficult to deſcribe in what manner the arms ſhould be uſed, nor is it neceſſary, becauſe thoſe who are ſuch proficients as to attempt this manœuvre, will certaintly know how to employ them.

There are many other movements performed on skates, beſides thoſe I have treated of; but, as they are neither graceful nor pleaſing, I ſhall here conclude, by ſaying, thoſe who can perform all the manœuvres mentioned in this treatiſe, will have no occaſion for any further inſtructions.

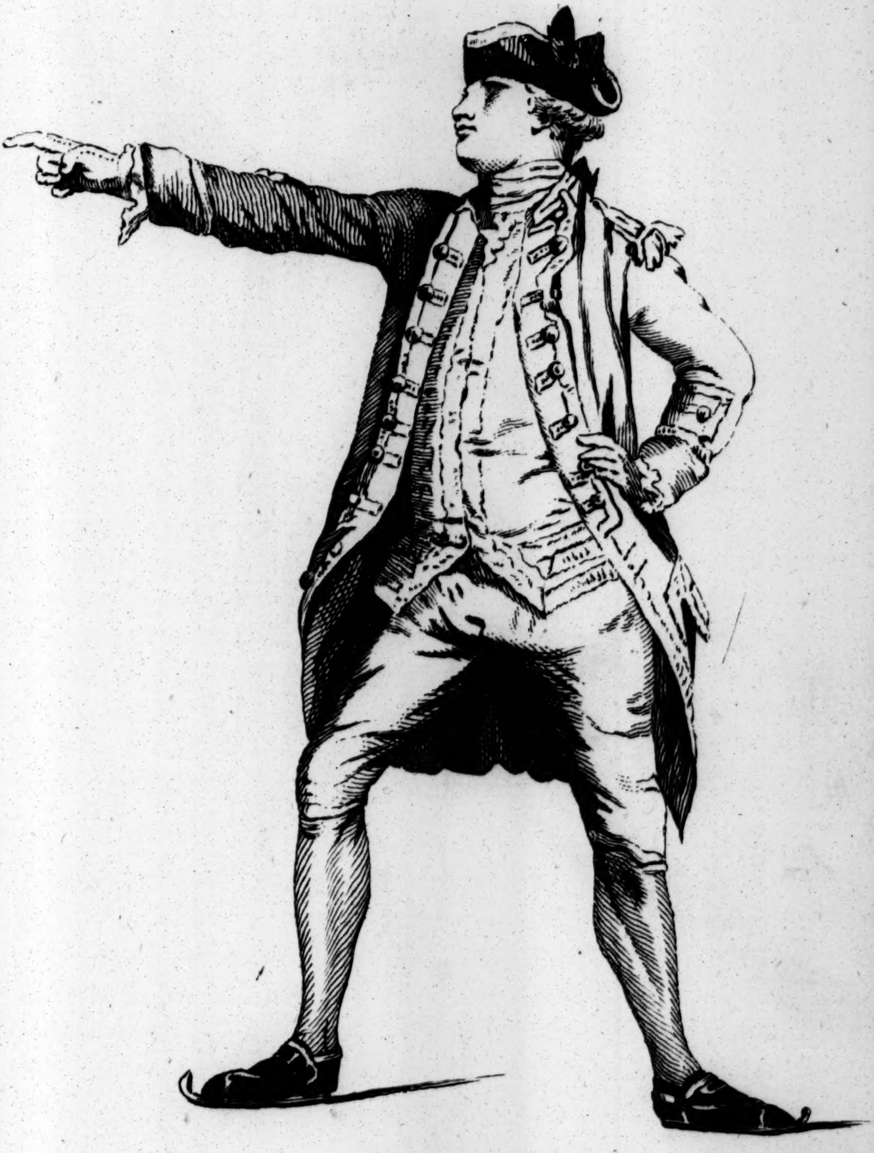
FINIS.

Pl. 2



W. Darling fect. Gt. Newport St.

P. 3



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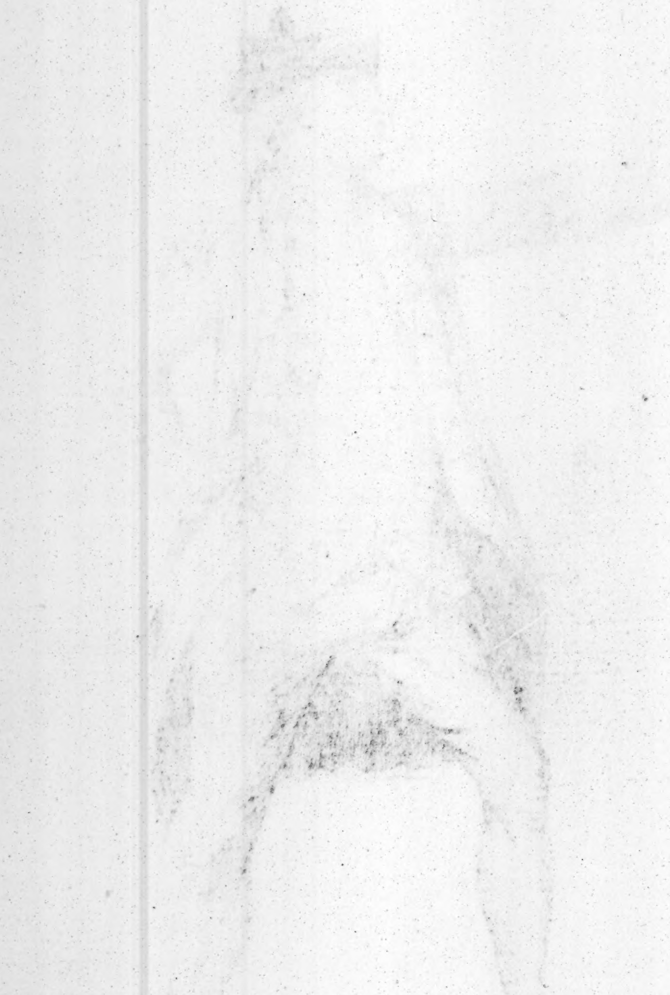
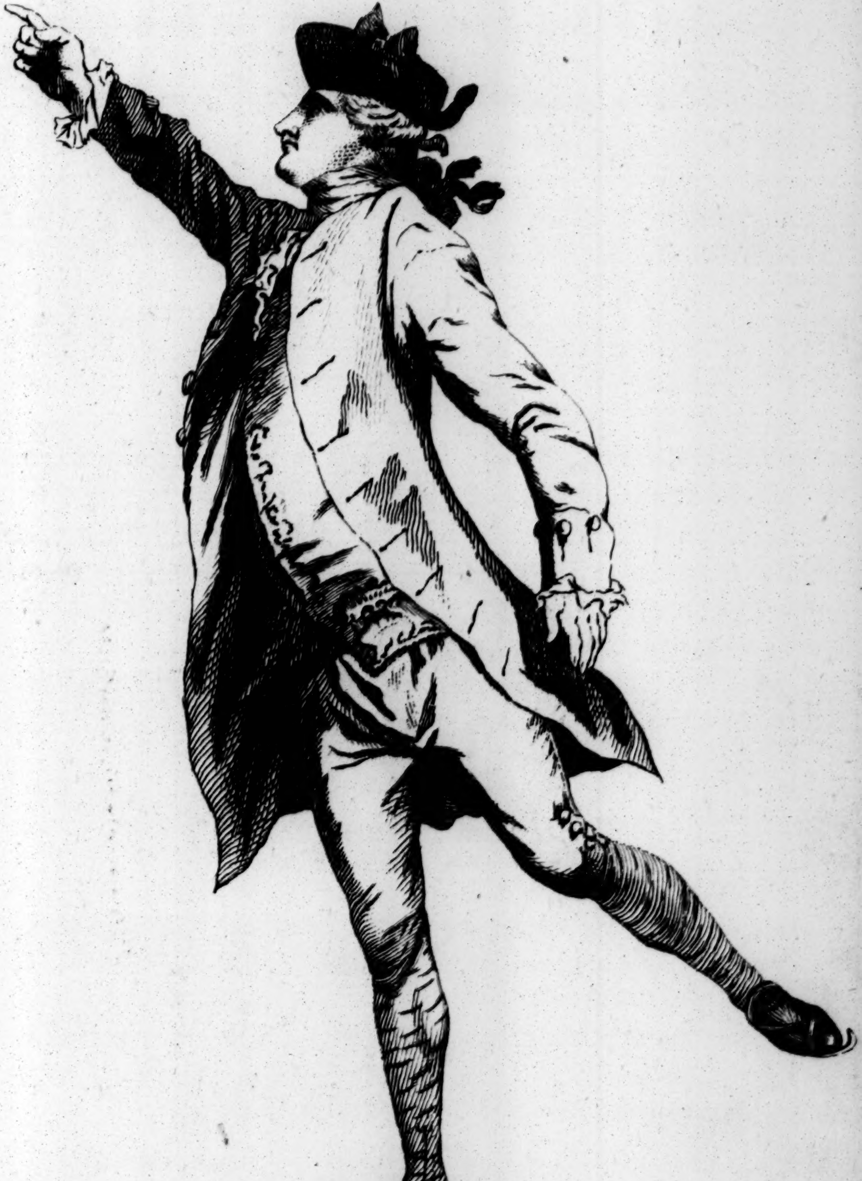


Pl.4



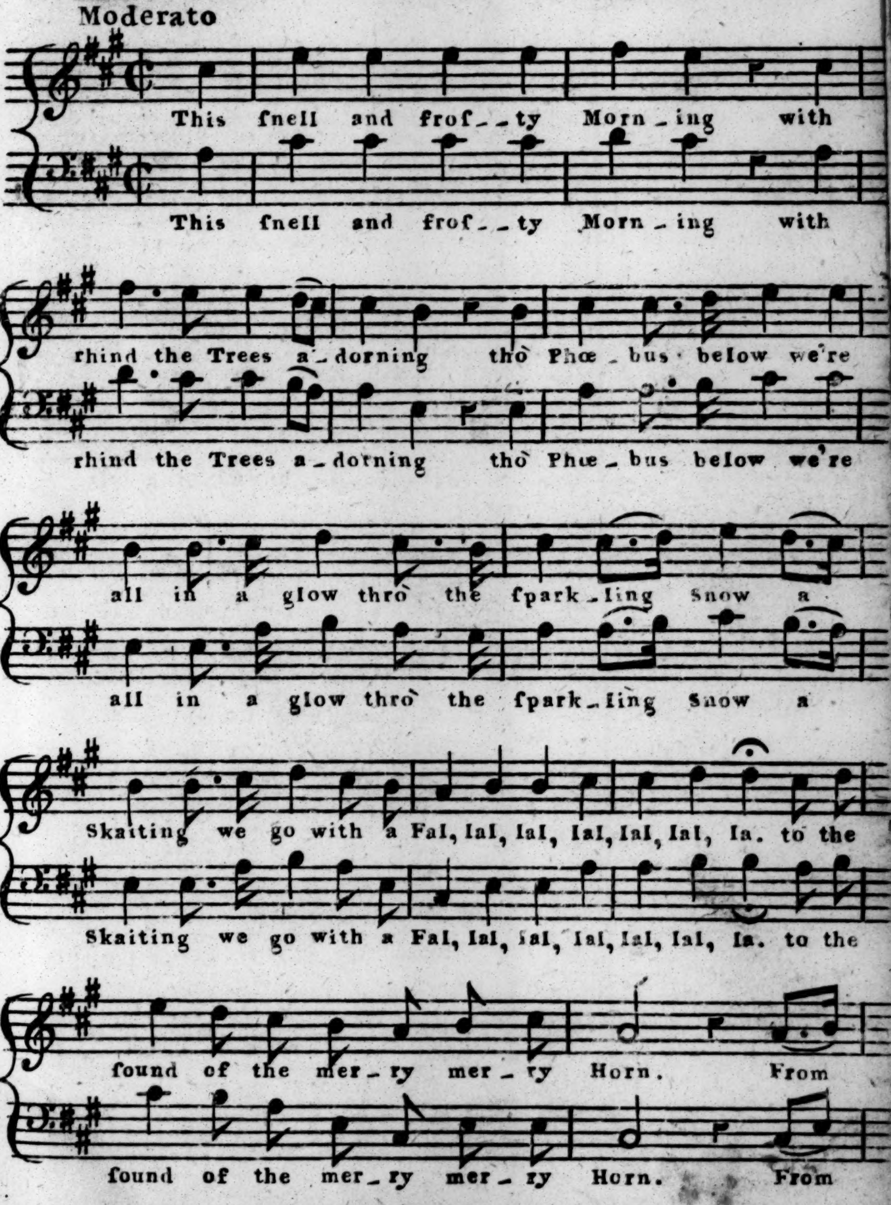
W Darling fect. Gt. Newport St.

THE SKAITER'S MARCH

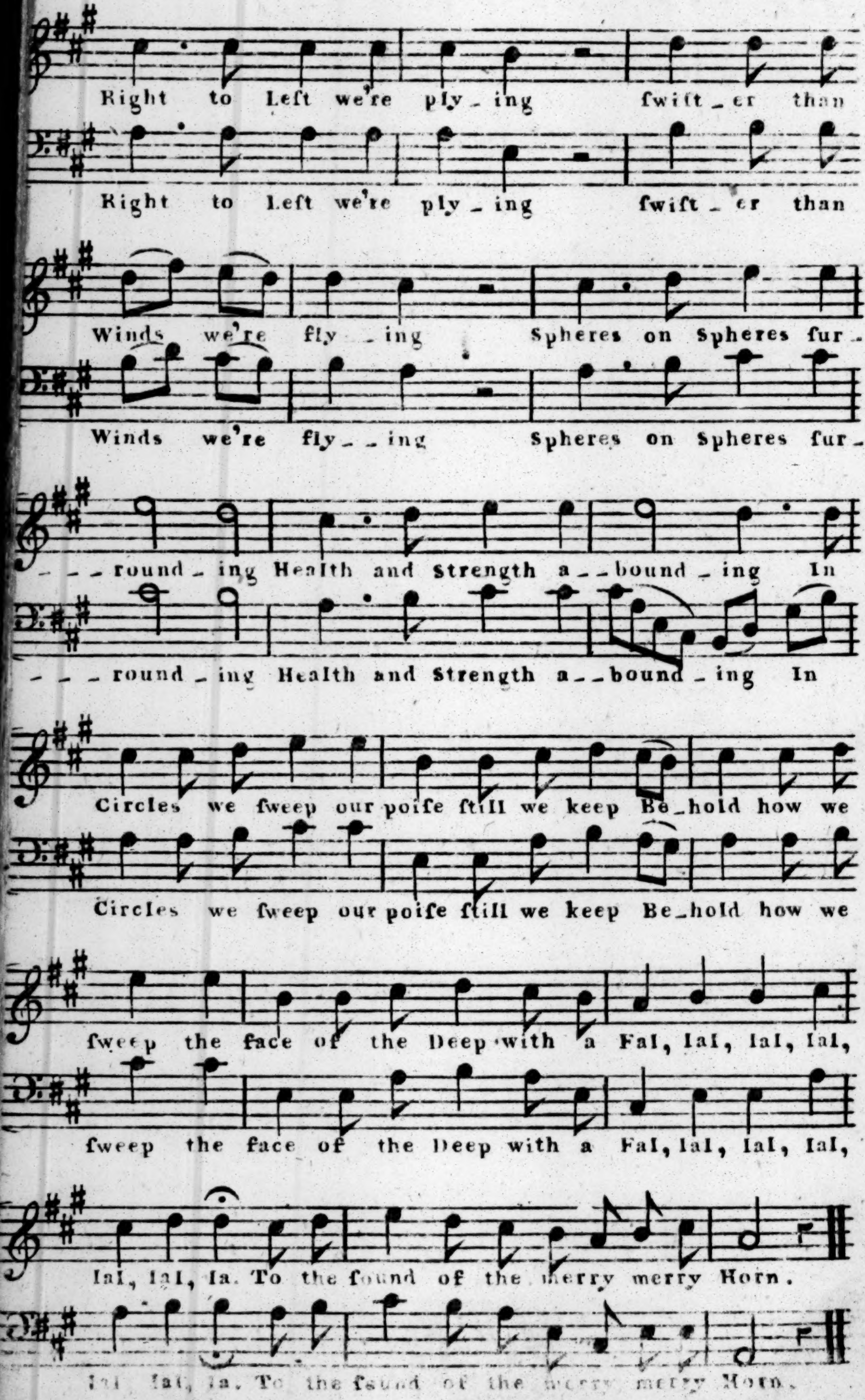
Compoſed for the Skaiter's Club of Edinburgh.

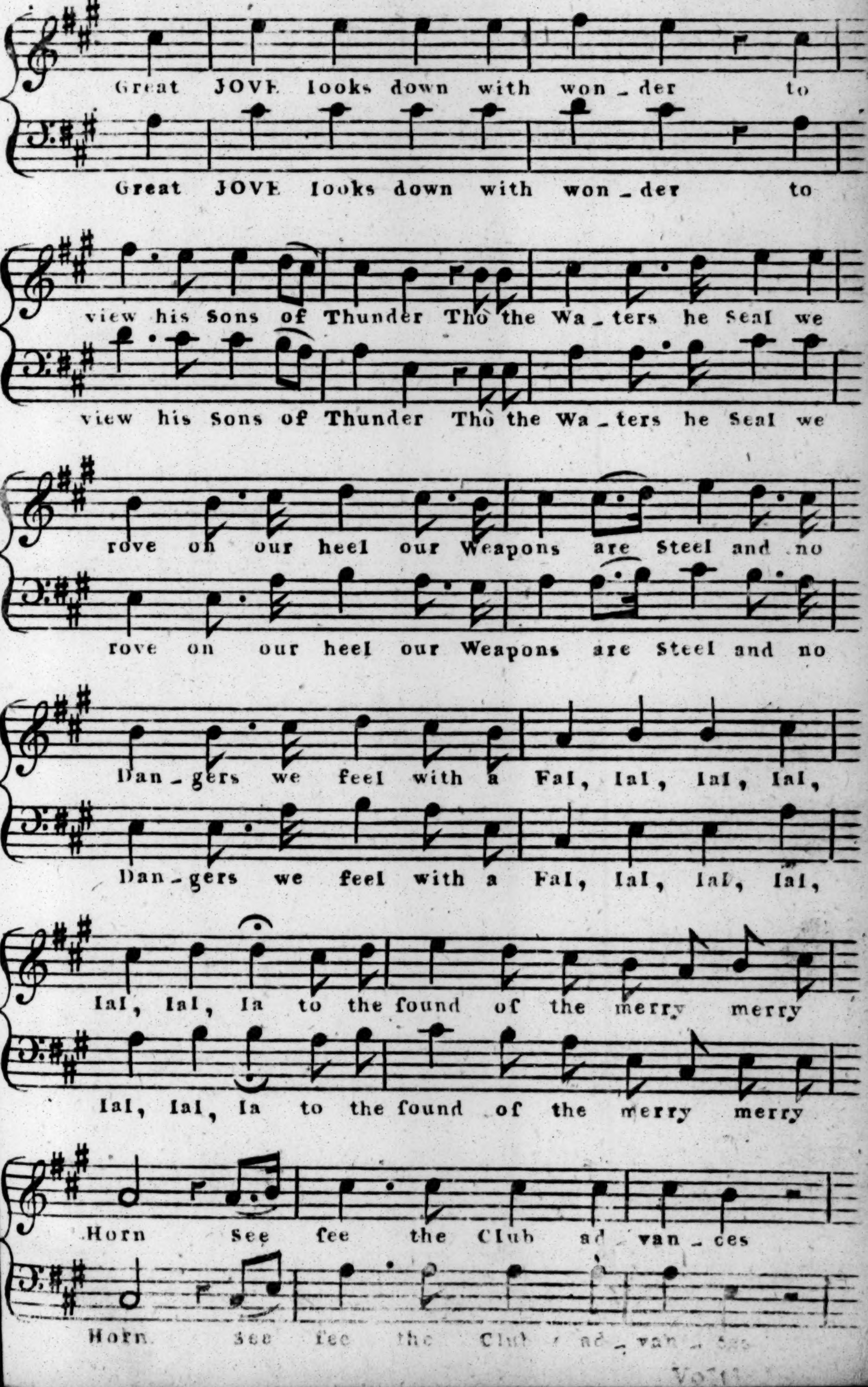
As Sung by Meſs.rs Banniſter and Wilſon.

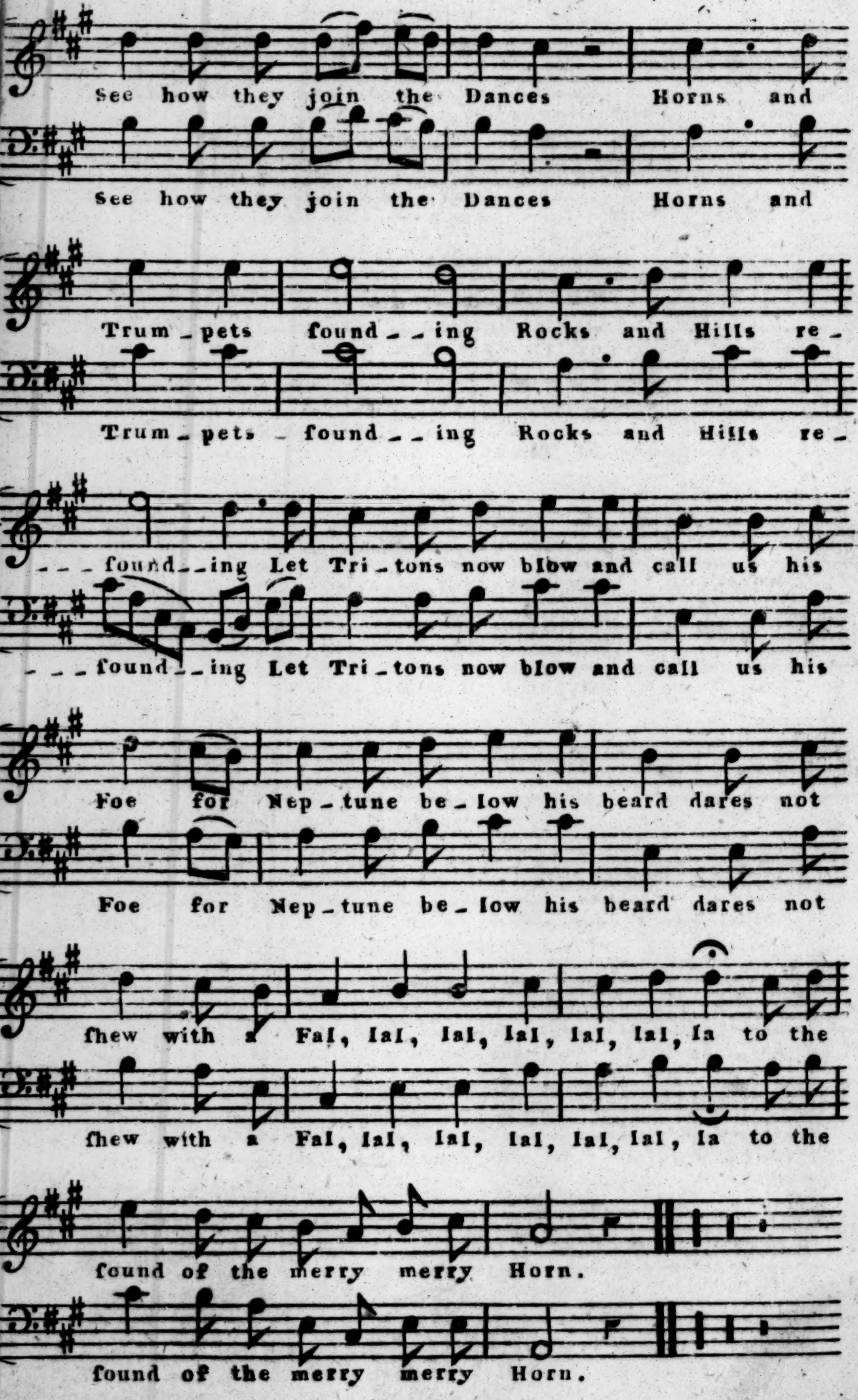
LONDON. Printed for J. FIELDING. N.o 23 Pater-noſter Row.


Moderato
This ſnell and froſ_ _ty Morn_ing with
rhind the Trees a_dorning tho' Phœ_bus below we're
all in a glow thro' the ſpark_ling Snow a
Skaiting we go with a Fal, lal, lal, lal, lal, lal, la. to the
found of the mer_ry mer_ry Horn. From

Engraved by T. Straight N.o 138 S.t Martins Lane. Volti


Right to Left we're ply_ing ſwift_er than
Right to Left we're ply_ing ſwift_er than
Winds we're fly_ _ing Spheres on Spheres ſur_
Winds we're fly_ _ing Spheres on Spheres ſur_
_ _ _round_ing Health and Strength a_ _bound_ing In
_ _ _round_ing Health and Strength a_ _bound_ing In
Circles we ſweep our poiſe ſtill we keep Be_hold how we
Circles we ſweep our poiſe ſtill we keep Be_hold how we
ſweep the face of the Deep with a Fal, lal, lal, lal,
ſweep the face of the Deep with a Fal, lal, lal, lal,
lal, lal, la. To the ſound of the merry merry Horn.
lal, lal, la. To the ſound of the merry merry Horn.


Great JOVE looks down with won_der to
Great JOVE looks down with won_der to
view his Sons of Thunder Tho the Wa_ters he Seal we
view his Sons of Thunder Tho the Wa_ters he Seal we
rove on our heel our Weapons are Steel and no
rove on our heel our Weapons are Steel and no
Dan_gers we feel with a Fal, lal, lal, lal,
Dan_gers we feel with a Fal, lal, lal, lal,
lal, lal, la to the found of the merry merry
lal, lal, la to the found of the merry merry
Horn See fee the Club ad_van_ces
Horn See fee the Club ad_van_ces


See how they join the Dances Horns and
See how they join the Dances Horns and
Trum_pets found_ _ing Rocks and Hills re_
Trum_pets _ found_ _ing Rocks and Hills re_
_ _ _found_ _ing Let Tri_tons now blow and call us his
_ _ _found_ _ing Let Tri_tons now blow and call us his
Foe for Nep_tune be_low his beard dares not
Foe for Nep_tune be_low his beard dares not
ſhew with a Fal, lal, lal, lal, lal, lal, la to the
ſhew with a Fal, lal, lal, lal, lal, lal, la to the
ſound of the merry merry Horn.
ſound of the merry merry Horn.